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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,529	06/26/2003	Francesco A. Campisano	END920030021US1	4833
23550 7590 09/11/2007 HOFFMAN WARNICK & D'ALESSANDRO, LLC 75 STATE STREET 14TH FLOOR ALBANY, NY 12207			EXAMINER ZHAO, DAQUAN	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/607,529

Applicant(s)

CAMPISANO ET AL.

Examiner

Daquan Zhao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claims Status

Claims 1, 8 and 14 are amended; Claims 2-7, 9-13 and 15-21 are original.

Response to Arguments

1. Applicant's arguments filed 6/26/2007 have been fully considered but they are not persuasive. Applicant argues, in page 9 of the remark, the synch bytes data of Kim is not a signal. On the other hand, "The Authoritative Dictionary Of IEEE Standards Terms" defines "signal" as "the physical representation of data", which means the synch bytes data of Kim is a "signal".
2. Applicant also argues Kim fails to teach the synch bytes is in the MPEG-2 decoder. However, on page 5 of the last Office Action, the examiner relies on the official notice of the MPEG2 decoder and "In re Larson, 340 F. 2d 965, 968; 144 USPQ 347, 349 (CCPA 1965)" for integrating the synch byte of Kim into the MPEG2 takes routine skill of one ordinary skill in the art at the time the invention was made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al (US 6,473,558 B1) and further in view of Seki et al (US 7,062,149 B2).

For claim 14, Wu et al teach an MPEG-2 buffer scheme for providing enhanced trick mode playback of a video stream, comprising:

a first buffer having a first pointer that is associated with a first address (e.g. column 9, line 46- column 10, line 57, also see column 7, line 53- column 8, line 28, Figure 6, F is considered to be the first pointer, and frame memory M1 and M3 together in frame buffer memory 230 of figure 2 is considered to be the first buffer, the address of M1 and M3 together in buffer memory 230 is consider to be the first address).

a second buffer having a second pointer that is associated with a second address (e.g. B is considered to be the second pointer, M2 and M4 together is consider to be the second buffer in buffer memory 230), wherein the first pointer is locked to the first buffer and the second pointer is locked to the second buffer (Pointer F is locked to M1 and M3 for frames I_0^2 and P_6^2 and pointer B is locked to M2 and M4 for frames

P_3^2 and P_9^2), and wherein a set of frames of the video stream comprising at least one I frame and at least zero P frames is decoded to the first buffer and the second buffer in

an alternating fashion based on a continuous swapping of the first address and the second address (e.g. pointers F and B are alternating for the first four frames I_0^2 and P_6^2 , P_3^2 and P_9^2).

Wu et al fail to teach strictly alternation on a frame by frame basis. Seki et al strictly alternation on a frame by frame basis (e.g. column 10, lines 42-48 and lines 55-67). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Seki et al into the teaching of Wu et al for compressing and decompressing data continuously in high speed (Seki et al, column 2, lines 43-46).

For claim 20, Wu et al teach the set of frames are part of a group of pictures with a set of B frames (e.g. see column 5, lines 46-60 for GOPs and column 4, lines 1-5 for I P and B frames).

For claim 18, Wu et al teach the display pointer is synchronized with the first address, and wherein the decoded set of frames is read out of the first buffer and the second buffer in the alternating fashion based on the display pointer (e.g. pointers F and B are for displaying the frames).

For claim 19, Wu et al teach the first buffer is a current buffer and the second buffer is a past buffer (e.g. buffers M1 and M2 are alternating).

For claim 21, Wu et al teach a third buffer, wherein the set of frames are decoded to the first buffer, the second buffer and the third buffer in the alternating fashion based on a continuous swapping of the first address, the second address and a third address (e.g. buffer M5 is consider to be the third buffer).

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4. Claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 15, and 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al (US 6,473,558 B1) and Seki et al (US 7,062,149 B2) as applied to claims 14 and 18-21 above, and further in view of Kim (US 6,466,733 B1).

See the teaching of Wu et al above.

For claims 1, 2, 8, 9, 15 and 16, Wu et al and Seki et al fail to teach disengagement of a frame synchronization signal. Kim teaches disengagement of a frame synchronization signal (e.g. column 8, lines 59- column 9, line 13, sync bites are separated from the trick play data). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim into the teaching of Wu et al to increase the stability of a system since Kim suggests to extract the sync block to simplify the error correction process when decoding a signal in a trick play mode (Kim, column 8, line 59-column 9, line 13). However, Wu et al, Seki et al and Kim fail to teach the system disclosed can be integrated into the MPEG-2 decoder. The examiner takes official notice for the MPEG2 decoder since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to integrate the system disclosed by Wu et al and Kim to minimize the size of the device. It has been held that making previously separated components integral into one unit without producing any new and unexpected result involves only routine skill in the art. See *In re Larson*, 340 F.2d 965, 968; 144 USPQ 347, 349 (CCPA 1965).

For claim 4, Wu et al teach the first buffer is a current buffer and the second buffer is a past buffer (e.g. buffers M1 and M2 are alternating).

For claim 6, Wu et al teach the set of frames are part of a group of pictures with a set of B frames (e.g. see column 5, lines 46-60 for GOPs and column 4, lines 1-5 for I P and B frames).

For claim 3, Wu et al teach synchronizing a display pointer with the first address and reading the decoded set of frames out of the first buffer and second buffer in the alternating fashion based on the display pointer (e.g. figure 6, frames are display in a sequence using the pointers F and B alternatively). However, Wu et al and Kim fail to teach the system disclosed can be integrated into the MPEG-2 decoder. The examiner takes official notice for the MPEG2 decoder since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to integrate the system disclosed by Wu et al and Kim to minimize the size of the device. It has been held that making previously separated components integral into one unit without producing any new and unexpected result involves only routine skill in the art. See *In re Larson*, 340 F.2d 965, 968; 144 USPQ 347, 349 (CCPA 1965).

Claims 7 and 10 is rejected for the same reasons as discussed in claim 3 above.

For claim 11, Wu et al teach the first buffer is a current buffer and the second buffer is a past buffer (e.g. buffers M1 and M2 are alternating).

For claim 12, Wu et al teach the set of frames are part of a group of pictures with a set of B frames (e.g. see column 5, lines 46-60 for GOPs and column 4, lines 1-5 for I P and B frames).

For claim 13, Wu et al teach a third buffer, wherein the set of frames are decoded to the first buffer, the second buffer and the third buffer in the alternating fashion based on a continuous swapping of the first address, the second address and a third address (e.g. buffer M5 is consider to be the third buffer).

5. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al (US 6,473,558), Seki et al (US 7,062,149 B2) and Kim (US 6,466,733) as applied to claims 1-4, 6-16, 18-21 above.

For claim 5 and 17, Wu et al, Seki et al and Kim fail to disclose the Microcode. The examiner takes official notice for the Microcode since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to have use the microcode in the system of Wu et al, Seki et al and Kim to reduce, the amount of hardware for cost efficient purpose.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

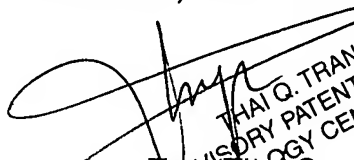
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing data of this action. In the event a first reply is filed within TWO MONTHS of the mailing data of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period. Then the shortened statutory period will expire on the data the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing data of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the data of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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